

CLAIMS

1. Surgical band (1) designed to be implanted in the body of a patient around a biological organ or organs, consisting of a pouch or a tube for altering the flow area of said organ when it is clamped by the band, said band (1) consisting of a flexible strip (2) designed to be substantially closed at its two ends (3, 4) in order to form a closed loop, said strip (2) comprising an annular compression chamber (7) designed to contain a filling fluid, said chamber (7) being defined, on the one hand, by an internal wall (8A) designed to be in contact with the organ being clamped and, on the other hand, a dorsal wall (8B), characterized in that said dorsal wall consists of a bead having an inner face (12) situated opposite the chamber (7), said inner face (12) being provided with at least one longitudinal slot (13) for influencing the deformation of the internal wall (8A) with a view to limiting the presence of surface irregularities in the area of the internal wall (8A), when the strip (2) forms a closed loop.
2. Band (1) of claim 1, characterized in that the internal wall (8A) consists of a membrane.
3. Band (1) as claimed in claim 1 or 2, characterized in that the chamber (7) is a chamber having a volume that can be adjusted by injecting or withdrawing said filling fluid.
4. Band as claimed in one of claims 1 to 3, characterized in that the bead has a homogeneous property and in that the longitudinal slot (13) is arranged entirely within the bead.

5. Band (1) as claimed in one of claims 1 to 4, characterized in that the internal wall (8A) is made of a first elastomer material, while the dorsal wall (8B) is made of a second elastomer material.

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6. Band (1) of claim 5, characterized in that said first and second materials are identical.

10 7. Band (1) of claim 6, characterized in that said first and second materials have substantially identical hardness levels.

8. Band (1) as claimed in one of claims 1 to 7, characterized in that the internal wall (8A) is made integral with the dorsal wall (8B).

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9. Band (1) as claimed in one of claims 1 to 8, characterized in that the inner face (12) of the bead is provided with a single longitudinal slot (13) positioned substantially at the center of said face.

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10. Band (1) as claimed in one of claims 1 to 9, characterized in that the longitudinal slot (13) has a substantially rectangular-shaped cross section.

25 11. Band (1) as claimed in one of claims 1 to 10, characterized in that the strip (2) is in the form of a solid tube having a substantially elliptical cross section, said tube being hollowed out so as to form both the chamber (7) and the longitudinal slot (13), said chamber (7) and slot (13) communicating in order to 30 form a single cavity (7, 13) whose cross-sectional shape substantially resembles that of a mushroom whose stem is formed by the slot (13), while the cap is formed by the chamber (7).

12. Band (1) of claim 11, characterized in that the cross section of the chamber (7) has an overall quarter-like appearance.

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13. Band (1) of claim 11, characterized in that the cross section of the chamber (7) has an overall crescent-like appearance.

10 14. Band (1) as claimed in one of claims 1 to 13, characterized in that it constitutes a gastroplasty band designed to be implanted around the stomach or the oesophagus.

15 15. Method of manufacturing a surgical band (1) designed to be implanted in the body of a patient around a biological organ or organs, consisting of a pouch or a tube for altering the flow area of said organ when it is clamped by the band (1) in which is made an annular compression chamber(7), designed to contain a filling fluid, said chamber (7) being defined, on the one hand, 20 by an internal wall (8A) designed to be in contact with the organ being clamped and, on the other hand, a dorsal wall (8B), said method characterized in that it includes a step for making the bead intended to form the dorsal wall(8B) said bead having an inner face (12) situated opposite the chamber (7), as well as 25 a step for creating said interior surface (12), with at least one longitudinal slot (13) for influencing the deformation of the internal wall (8A) with a view to limiting the presence of surface irregularities in the area of the internal wall (8A), when the strip (2) forms a closed loop.

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16. Method of claim 15, characterized in that the internal wall (8A) consists of a membrane.

17. Method as claimed in claim 15 or 16, characterized in that the chamber (7) is a chamber having a volume that can be adjusted by injecting or withdrawing filling fluid.

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18. Method as claimed in one of claims 15 to 17, characterized in that the chamber (7), the internal (8A) and dorsal (8B) walls, as well as said at least one slot (13) are produced by a single operation of injecting a single elastomer material into a mold.

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19. Method as claimed in one of claims 15 to 18, characterized in that it consists of a method of manufacturing a gastroplasty band (1) designed to be implanted around the stomach or the oesophagus.

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